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# SPACE OPERATIONS CONTROL CENTER SATELLITE SITUATION REPORT

VOL. 2, NO. 14

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PREPARED BY

OPERATIONS BRANCH

OPERATIONS AND SUPPORT DIVISION

AUGUST 14, 1962



— GODDARD SPACE FLIGHT CENTER —

GREENBELT, MD.

SPACE OPERATIONS CONTROL CENTER  
GODDARD SPACE FLIGHT CENTER  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
GREENBELT, MARYLAND

VOLUME 2, No. 14

AUGUST 14, 1962

SATELLITE SITUATION REPORT

THE FOLLOWING REPORT REFLECTS DATA COMPUTED AND COMPILED BY  
GODDARD SPACE FLIGHT CENTER, NORAD, AND SMITHSONIAN ASTROPHYSICAL  
OBSERVATORY AS OF 1430Z ON AUGUST 14, 1962.

  
RALPH R. STROBLE  
HEAD, OPERATIONS BRANCH

OBJECT	OBJECTS IN ORBIT					TRANSMITTING FREQ. (MC/S)	
	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLI- NATION		APOGEE Km.
1958 LAUNCHES							
ALPHA 1	EXPLORER I	US	1 FEB	105.5	33.19	1688	364
BETA 1	ROCKET BODY	US	17 MAR	138.3	34.26	4370	606
BETA 2	VANGUARD I	US	17 MAR	133.9	34.25	3941	656
1959 LAUNCHES							
ALPHA 1	VANGUARD II	US	17 FEB	125.3	32.92	3262	588
ALPHA 2	ROCKET BODY	US	17 FEB	129.6	32.90	3665	557
ETA 1	VANGUARD III	US	18 SEP	129.7	33.36	3719	516
MU 1*	LUNIK I	USSR	2 JAN	450D	0.01	1.315AU	0.9766AU
NU 1*	PIONEER IV	US	3 MAR	398D	1.30	1.142AU	0.9871AU
IOTA 1	EXPLORER VII	US	13 OCT	101.1	50.30	1072	557
IOTA 2	ROCKET BODY	US	13 OCT	100.9	50.30	1046	563
1960 LAUNCHES							
ALPHA 1*	PIONEER V	US	11 MAR	311.6D	3.35	0.995AU	0.8061AU
BETA 1	ROCKET BODY	US	1 APR	99.1	48.39	746	689
BETA 2	TIROS I	US	1 APR	99.1	48.38	731	710
BETA 3	NONE	US	1 APR	97.8	48.50	701	617
BETA 4	NONE	US	1 APR	99.8	48.17	805	702
GAMMA 2	TRANSIT 1B	US	13 APR	94.5	51.26	643	350
GAMMA 4	NONE	US	13 APR	96.8	51.26	735	478
EPSILON 1	SPUTNIK IV	USSR	15 MAY	89.3	64.96	256	221
EPSILON 3	NONE	USSR	15 MAY	92.6	64.97	523	278
ZETA 1	MIDAS II	US	24 MAY	94.2	33.03	538	439
ETA 1	TRANSIT 2A	US	22 JUN	101.6	66.70	1063	608
ETA 2	GREB	US	22 JUN	101.6	66.69	1056	613
ETA 3	ROCKET BODY	US	22 JUN	101.4	66.68	1040	610
IOTA 1	ECHO I	US	12 AUG	115.9	47.28	1849	1151
IOTA 2	ROCKET BODY	US	12 AUG	118.0	47.20	1706	1482
IOTA 3	METAL OBJECT	US	12 AUG	118.2	47.21	1680	1523
IOTA 4	METAL OBJECT	US	12 AUG				
INSUFFICIENT OBSERVATIONS							

OBJECTS IN ORBIT (CONT'D)

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>INCLINATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
<b>1960 LAUNCHES (CONT'D)</b>								
IOTA 5	METAL OBJECT	US	12 AUG	118.3	47.28	1678	1542	
NU 1	COURIER IB	US	4 OCT	106.9	28.34	1217	962	
NU 2	ROCKET BODY	US	4 OCT	106.4	28.30	1196	939	
XI 1	EXPLORER VIII	US	3 NOV	112.4	49.95	2266	413	
XI 2	ROCKET BODY	US	3 NOV	112.1	49.95	2235	417	
XI 3	NONE	US	3 NOV	110.3	49.40	2095	395	
XI 4	NONE	US	3 NOV	111.3	50.51	2153	425	
PI 1	TIROS II	US	23 NOV	98.2	48.52	740	610	
PI 2	ROCKET BODY	US	23 NOV	98.1	48.55	707	632	
PI 3	NONE	US	23 NOV	98.1	48.53	720	624	
PI 4	NONE	US	23 NOV	98.2	48.52	730	627	
<b>1961 LAUNCHES</b>								
ALPHA 1	SAMOS II	US	31 JAN	94.9	97.43	552	465	
ALPHA 2	METAL OBJECT	US	31 JAN	94.8	97.42	550	463	
GAMMA 1*	VENUS PROBE	USSR	12 FEB	300D	0.58	1.0190AU	0.7183AU	
DELTA 1	EXPLORER IX	US	16 FEB	117.8	38.82	2445	728	
DELTA 2	ROCKET BODY	US	16 FEB	118.4	38.83	2577	653	
DELTA 3	NONE	US	16 FEB	INSUFFICIENT OBSERVATIONS				
KAPPA 1	EXPLORER X	US	25 MAR	POSITION UNCERTAIN				
NU 1	EXPLORER XI	US	27 APR	107.8	28.85	1782	487	
OMICRON 1	TRANSIT IV-A	US	29 JUN	103.8	66.81	1001	877	54;150;324;400
OMICRON 2	INJUN-SR-3	US	29 JUN	103.8	66.81	1001	878	136.5
OMICRON 3-27**	METAL OBJECTS	US	29 JUN					
OMICRON 29-45**	METAL OBJECTS	US	29 JUN					
OMICRON 47-120**	METAL OBJECTS	US	29 JUN					
RHO 1	TIROS III	US	12 JUL	100.3	47.89	811	745	
RHO 2	ROCKET BODY	US	12 JUL	100.3	47.89	810	741	
RHO 3	METAL OBJECT	US	12 JUL	98.8	47.95	804	606	
RHO 4	METAL OBJECT	US	12 JUL	101.9	47.83	939	768	
SIGMA 1	MIDAS III	US	12 JUL	161.5	91.06	3489	3401	
SIGMA 3	METAL OBJECT	US	12 JUL	161.2	91.15	3538	3324	
SIGMA 4	METAL OBJECT	US	12 JUL	161.9	91.18	3558	3365	

# OBJECTS IN ORBIT (CONT'D)

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>INCLINATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1961 LAUNCHES CONT'D								
UPSILON 1	EXPLORER XII	US	16 AUG	INSUFFICIENT OBSERVATIONS				
A DELTA 1	MIDAS IV	US	21 OCT	166.0	95.83	3739	3512	
A DELTA 3	METAL OBJECT	US	21 OCT	165.6	95.85	3718	3502	
A DELTA 4	METAL OBJECT	US	21 OCT	166.4	95.86	3773	3512	
A EPSILON 1	DISCOVERER XXXIV	US	5 NOV	93.3	82.50	636	230	
A ETA 1	TRANSIT IV-B	US	15 NOV	105.6	32.43	1116	946	136.8;54;324;150;400
A ETA 2	TRAAC	US	15 NOV	105.6	32.43	1112	952	136.65;54;324
A ETA 3	ROCKET BODY	US	15 NOV	105.5	32.43	1107	942	
A LAMBDA 1		US	22 DEC	87.8	89.66	161	161	

## 1962 LAUNCHES

ALPHA 1*	RANGER III	US	26 JAN	406.4D	.3988	1.163AU	0.9839AU	
ALPHA 2	ROCKET BODY	US	26 JAN	INSUFFICIENT OBSERVATIONS				
BETA 1	TIROS IV	US	6 FEB	100.3	48.29	853	697	136.23;136.92
BETA 2	ROCKET BODY	US	8 FEB	101.3	48.15	951	695	
BETA 3	METAL OBJECT	US	8 FEB	99.4	48.44	771	697	
BETA 4	METAL OBJECT	US	8 FEB	100.2	48.31	851	696	
ZETA 1	ORB. SOL. OBS. 1	US	7 MAR	95.9	32.81	593	548	136.744
ZETA 2	ROCKET BODY	US	7 MAR	96.0	32.84	604	543	
ETA 1		US	7 MAR	92.9	90.88	586	244	
ETA 3		US	7 MAR	92.0	90.88	501	238	
IOTA 1	COSMOS II	USSR	6 APR	99.8	48.96	1294	213	
IOTA 2	ROCKET BODY	USSR	6 APR	95.0	48.89	844	202	
KAPPA 1		US	9 APR	153.0	86.77	3379	2816	
KAPPA 3		US	9 APR	152.7	86.67	3366	2797	
KAPPA 4		US	9 APR	153.4	86.63	3426	2798	
MU 2	ROCKET BODY	US	23 APR	INSUFFICIENT OBSERVATIONS				
NU 1	COSMOS 3	USSR	24 APR	91.9	48.84	524	221	136.408
OMICRON 1	ARIEL	US/UK	26 APR	100.8	53.85	1209	390	
OMICRON 2	ROCKET BODY	US/UK	26 APR	100.8	53.84	1217	385	

OBJECTS IN ORBIT (CONT'D)

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>INCLINATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1962 LAUNCHES CONT'D								
SIGMA 1		US	15 MAY	93.7	82.35	628	297	
UPSILON 1	COSMOS 5	USSR	28 MAY	101.2	48.99	1434	199	20.064
UPSILON 2	ROCKET BODY	USSR	28 MAY	101.0	48.99	1326	197	
OMEGA 1		US	18 JUN	92.3	82.15	403	366	
A ALPHA 1	TIROS V	US	19 JUN	100.5	58.07	974	589	136.235; 136.922
A ALPHA 2	ROCKET BODY	US	19 JUN	100.4	58.08	958	599	
A ALPHA 3	METAL OBJECT	US	19 JUN	101.7	58.19	1091	593	
A ALPHA 4	METAL OBJECT	US	19 JUN	99.1	57.97	867	567	
A GAMMA 1		US	28 JUN	91.7	76.04	516	192	
A DELTA 1	COSMOS 6	USSR	30 JUN	89.8	48.98	279	262	
A EPSILON 1	TELSTAR 1	US	10 JUL	157.7	44.82	5635	952	136.05
A EPSILON 2	ROCKET BODY	US	10 JUL	157.5	44.78	5639	935	
A ETA 1		US	21 JUL	88.1	70.29	177	177	
A THETA 1		US	28 JUL	89.9	71.09	347	188	
A IOTA 2	ROCKET BODY	USSR	28 JUL	90.0	64.98	343	209	
A KAPPA 1		US	2 AUG	90.2	82.25	366	194	
A MU 1	VOSTOK III	USSR	11 AUG	88.1	64.96	197	160	19.995
A NU 1	VOSTOK IV	USSR	12 AUG	88.2	65.00	208	165	19.990

\*APHELION, PERIHELION IN ASTRONOMICAL UNITS, INCLINATION TO ECLIPTIC.

\*\*ONE HUNDRED AND EIGHTEEN METAL OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1961 OMICRON 1 AND 1961 OMICRON 2. OBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED OBJECTS LISTS.

PLEASE ADD THE FOLLOWING TO THE DECAYED OBJECTS LIST

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>DECAY</u>
1962 NU 2	ROCKET BODY	USSR	24 APR 62	5 AUG 62
1962 A DELTA 2	ROCKET BODY	USSR	30 JUN 62	8 AUG 62
1962 A IOTA 1	COSMOS VII	USSR	28 JUL 62	1 AUG 62
1962 A IOTA 3	METAL OBJECT	USSR	28 JUL 62	31 JUL 62
1962 A KAPPA 2		US	2 AUG 62	8 AUG 62
1962 A LAMBDA 1		US	5 AUG 62	6 AUG 62
1962 A MU 2		USSR	11 AUG 62	14 AUG 62
1962 A NU 2		USSR	12 AUG 62	14 AUG 62